

Notice of Allowability

Application No.

10/795,849

Applicant(s)

LIVELY ET AL.

Examiner

Keith O. Robinson, Ph.D.

Art Unit

1638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 3/8/2004.
2. ☒ The allowed claim(s) is/are 1-33.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☒ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 5/17/2004
4. ☒ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Steven Callistein on January 13, 2005.

IN THE CLAIMS:

In claim 18, “, the principle mycotoxin causing Fusarium head blight” was deleted.

The following is an examiner's statement of reasons for allowance: Claims 1-33 are deemed free of the prior art, given the failure of the prior art to teach or reasonably suggest a wheat plant with the complete genetic complement and morphological trait collection exhibited by wheat variety, 25R35. The closest prior art, Lafever (Crop Sci. 29:831, 1989) teaches wheat plants with winter vernalization, anthocyanin absent in coleoptile, green plant color at boot stage, yellow anther color, awned head, glumes with acuminate beak and medium width, ovate seed shape, non-collared brush, red colored, soft textured seed, resistance to Leaf Rust and susceptibility to Hessian fly (see page 831). Lafever does not teach a wheat plant that has semi-erect juvenile plant

Art Unit: 1638

growth, recurved and twisted flag leaf; stems with absence of anthocyanin, waxy bloom, presence of hairiness and peduncle, and hollow internodes; middense, tapering, and inclined head; glumes that are tan, with wanting shoulders and medium length; seed with rounded cheeks and short brush; dark brown phenol reaction, and resistance to scab.

Conclusion

Claims 1-33 are allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lopez et al (Crop Sci. 43:577-582, 2003) teach late embryogenesis abundant (LEA) proteins, which are also known as dehydrins and represent a family of proteins that are expressed after plants are exposed to stresses with a dehydrative component (see page 577, second column, second paragraph). Abebe et al (Plant Physiol. 131:1748-1755, 2003) teach the insertion of the *MtID* gene, which encodes for mannitol-1-phosphate dehydrogenase (see page 1749, first column, first paragraph), into wheat to evaluate its role in improving water stress tolerance and

salinity and showed that mannitol improves growth of transgenic wheat under water stress and salinity (see page 1751, first column, first paragraph).

REQUIREMENT OF ALLOWANCE UNDER 37 CFR 1.801-1.809

The Deposit Statement on page 36 of the specification is deemed in accordance with 37 CFR 1.801-1.809. Since the application is otherwise in condition for allowance except for the needed deposit of seed, and since the Office has received written assurance that an acceptable deposit will be made on or before payment of the issue fee, the Office is authorized to mail Applicant a Notice of Allowance and Issue Fee Due together with a requirement that the needed deposit be made within THREE (3) MONTHS of the mail date of this letter (see 37 CFR 1.809(c)).

As set forth in 37 CFR 1.809(c), Applicant is required to deposit 2500 seeds of the claimed plant within THREE (3) MONTHS of the mail date of this letter; thus the time for making the deposit is on or before the payment of the issue fee. Although the time period for paying the issue fee cannot be extended, the time period for satisfying the deposit requirement may be extended under the provisions of 37 CFR 1.136. Failure to make the needed deposit of 2500 seeds will result in abandonment of the application for failure to prosecute.

Applicant is reminded that once the deposit of seed has been made, information regarding the date of deposit, description of the deposited material including number of seeds deposited, name and address of the depository, and the accession number must be added to the specification in order to comply with 37 CFR 1.809(d). In addition, the

Art Unit: 1638

claims must be amended to replace the blank "____" with the appropriate Accession Number. Amendments to the specification and the claims should be submitted before the payment of the issue fee as an Amendment After Allowance under 37 CFR 1.312. If the amendment is received after the payment of the issue fee, the same should be made under the provisions of 37 CFR 1.312(a) and a petition filed under 37 CFR 1.183 to waive the requirement of 37 CFR 1.312 that the amendment be filed before or with payment of the issue fee; that is, it must be accompanied by a fee in accordance with 37 CFR 1.17(i) and a petition which includes a "showing of good and sufficient reasons why the amendment is necessary and was not earlier presented, and why justice requires waiver of the rule."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith O. Robinson, Ph.D. whose telephone number is 571-272-2918. The examiner can normally be reached on Monday - Friday 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson, Ph.D. can be reached on 571-272-0804. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

February 1, 2005

KOR

DAVID T. FOX
PRIMARY EXAMINER
GROUP 180/1638

A handwritten signature in black ink, appearing to read "David T. Fox", with a stylized flourish at the end.